

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/01/2014 12:00 AST, water levels across the U.S. Virgin Islands and Puerto Rico are slightly elevated. Levels across the Virgin Islands and the east coast of Puerto Rico range between 0.1 and 0.3 feet above tidal predictions. Water levels at Yabucoa Harbor and Mona Island, PR are slightly higher and are measuring about 0.5 feet above tidal predictions. Wind speeds are increasing slightly across the U.S. Virgin Islands and the eastern coast of Puerto Rico with speeds measuring 10-15 kts with slightly higher gusts. Barometric pressure remains steady across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: PFF
SELECT <u>NATIONAL HURRICANE CENTER</u> ADVISORY INFORMATION:
TROPICAL STORM BERTHA ADVISORY NUMBER 3
NWS NATIONAL HURRICANE CENTER MIAMI FL
1100 AM AST FRI AUG 01 2014
CORRECTED WATCH POINTS FOR THE DOMINICAN REPUBLIC
HURRICANE HUNTER AIRCRAFT REPORTS BERTHA SLIGHTLY STRONGER BUT DISORGANIZED
WATCHES AND WARNINGS
A TROPICAL STORM WARNING IS IN EFFECT FOR
* PUERTO RICO
* VIEQUES
* CULEBRA
* U.S. VIRGIN ISLANDS
A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREAIN THIS CASE WITHIN THE NEXT 24 HOURS.
A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREAGENERALLY WITHIN 48 HOURS.
INTERESTS ELSEWHERE ACROSS THE NORTHEASTERN CARIBBEAN SEA AND HISPANIOLA SHOULD MONITOR THE PROGRESS OF THIS SYSTEM.
FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATESINCLUDING POSSIBLE INLAND WATCHES AND WARNINGSPLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE UNITED STATESPLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.
DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 AM AST...1500 UTC...THE CENTER OF TROPICAL STORM BERTHA WAS LOCATED NEAR LATITUDE 14.0 NORTH...LONGITUDE 58.9 WEST OR ABOUT 70 MI...110 KM NE OF BARBADOS. BERTHA IS MOVING TOWARD THE WEST-NORTHWEST NEAR 21 MPH...33 KM/H...AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS. ON THE FORECAST TRACK...BERTHA IS EXPECTED TO PASS NORTH OF BARBADOS DURING THE NEXT SEVERAL HOURS AND MOVE THROUGH THE CENTRAL LESSER ANTILLES TONIGHT...AND APPROACH THE VIRGIN ISLANDS AND PUERTO RICO ON SATURDAY.

REPORTS FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 50 MPH... 85 KM/H...WITH HIGHER GUSTS. UPPER-LEVEL WINDS ARE CURRENTLY NOT FAVORABLE FOR ADDITIONAL STRENGTHENING...AND LITTLE CHANGE IN STRENGTH IS FORECAST DURING THE NEXT 48 HOURS.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 115 MILES...185 KM MAINLY TO THE NORTHEAST OF THE CENTER.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 1008 MB...29.77 INCHES.

HAZARDS AFFECTING LAND

FORECASTER BEVEN

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO FIRST REACH THE WARNING AREA THIS AFTERNOON...MAKING OUTSIDE PREPARATIONS DIFFICULT OR DANGEROUS. TROPICAL STORM CONDITIONS ARE EXPECTED IN PUERTO RICO AND THE VIRGIN ISLANDS ON SATURDAY.

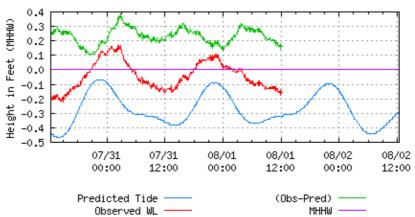
RAINFALL...BERTHA IS EXPECTED TO PRODUCE RAINFALL AMOUNTS OF 1 TO 3 INCHES WITH ISOLATED AMOUNTS UP TO 6 INCHES ACROSS PORTIONS OF THE LEEWARD ISLANDS...AS WELL AS THE U. S. AND BRITISH VIRGIN ISLANDS. RAINFALL TOTALS OF 3 TO 6 INCHES WITH ISOLATED MAXIMUM TOTALS OF 10 INCHES ARE POSSIBLE ACROSS PUERTO RICO...WITH THE HEAVIEST TOTALS ACROSS THE SOUTHERN PORTION OF THE ISLAND.

NEXT ADVISORY
----NEXT INTERMEDIATE ADVISORY...200 PM AST.
NEXT COMPLETE ADVISORY...500 PM AST.

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

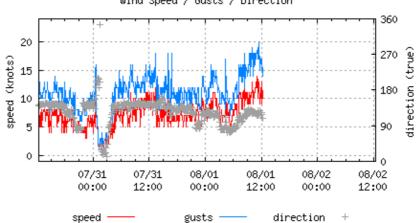
Jump to: Lime Tree Bay - Water Level, Lime Tree Bay - Winds, Lime Tree Bay - Barometric, Lameshur Bay, St John - Water Level, Lameshur Bay, St John - Barometric, Charlotte Amalie - Water Level, Charlotte Amalie - Winds, Charlotte Amalie - Barometric, Esperanza, Vieques Island - Water Level, Esperanza, Vieques Island - Winds, Esperanza, Vieques Island - Barometric, Yabucoa Harbor - Water Level, Yabucoa Harbor - Winds, San Juan - Water Level, San Juan - Winds, San Juan - Barometric, Mayaguez - Water Level, Mayaguez - Winds, Mona Island - Water Level, Mona Island - Barometric

NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



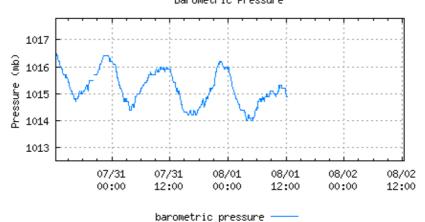
Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.32 ft. Residual: 0.17 ft. Historical Maximum Water Level: Nov 17 1999, 1.88 ft. Next High Tide: 08/01/2014 21:55 (AST), -0.10 ft.

NOAA/NOS/CO-OPS 9751401 Lime Tree Bay, VI Wind Speed / Gusts / Direction



Last Observed Sample: 08/01/2014 12:18 (AST) Wind Speed: 13 knots Gusts: 17 knots Direction: 116° T

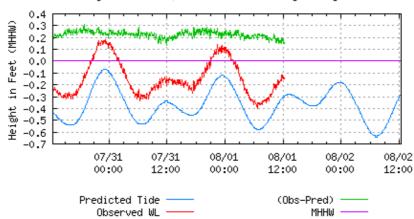
NOAA/NOS/CO-OPS <u>9751401 Lime Tree Bay, VI</u> Barometric Pressure



Last Observed Sample: 08/01/2014 12:18 (AST)

Barometric Pressure: 1014.8 mb

NOAA/NOS/CO-OPS <u>9751381 Lameshur Bay, St John, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

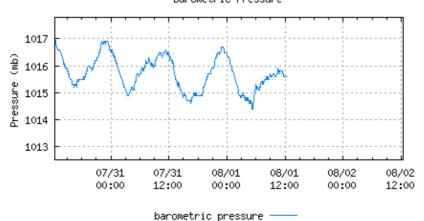


Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.30 ft. Residual: 0.15 ft.

Historical Maximum Water Level: Aug 30 2010, 0.89 ft.

Next High Tide: 08/01/2014 13:14 (AST), -0.28 ft.

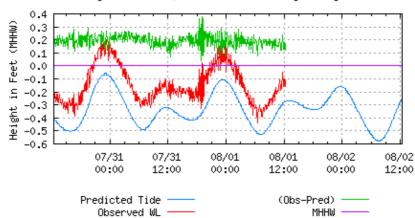
NOAA/NOS/CO-OPS <u>9751381 Lameshur Bay, St John, VI</u> Barometric Pressure



Last Observed Sample: 08/01/2014 12:18 (AST)

Barometric Pressure: 1015.6 mb

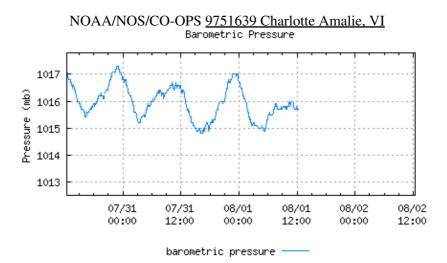
NOAA/NOS/CO-OPS <u>9751639 Charlotte Amalie, VI</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: -0.16 ft. Predicted: -0.28 ft. Residual: 0.12 ft. Historical Maximum Water Level: Sep 16 1995, 2.93 ft. Next High Tide: 08/01/2014 13:04 (AST), -0.27 ft.

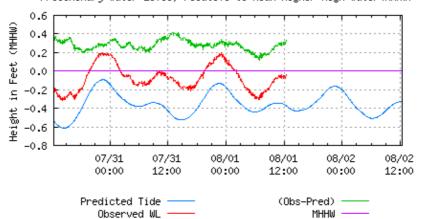
NOAA/NOS/CO-OPS 9751639 Charlotte Amalie, VI Wind Speed / Gusts / Direction 360 20 270 direction (true) speed (knots) 15 180 10 5 0 07/31 07/31 08/01 08/01 08/02 08/02 00:00 12:00 00:00 12:00 00:00 12:00 speed gusts direction Last Observed Sample: 08/01/2014 12:18 (AST)

Wind Speed: 5 knots Gusts: 14 knots Direction: 81° T



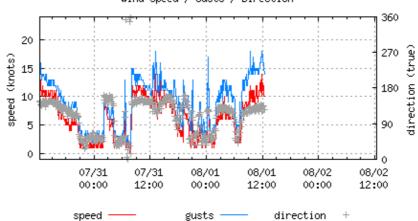
Last Observed Sample: 08/01/2014 12:18 (AST)
Barometric Pressure: 1015.7 mb

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW)



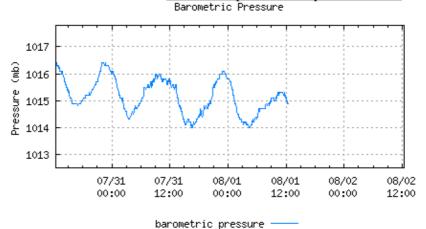
Last Observed Sample: 08/01/2014 12:24 (AST). Data relative to MHHW Observed: -0.04 ft. Predicted: -0.37 ft. Residual: 0.33 ft. Historical Maximum Water Level: Aug 22 2011, 0.99 ft. Next High Tide: 08/01/2014 22:27 (AST), -0.16 ft.

NOAA/NOS/CO-OPS 9752695 Esperanza, Vieques Island, PR Wind Speed / Gusts / Direction



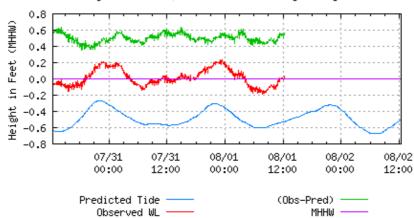
Last Observed Sample: 08/01/2014 12:24 (AST) Wind Speed: 10 knots Gusts: 14 knots Direction: 125° T

NOAA/NOS/CO-OPS <u>9752695 Esperanza</u>, <u>Vieques Island</u>, <u>PR</u>



Last Observed Sample: 08/01/2014 12:24 (AST)
Barometric Pressure: 1014.9 mb

NOAA/NOS/CO-OPS <u>9754228 Yabucoa Harbor, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: 0.03 ft. Predicted: -0.53 ft. Residual: 0.56 ft.

Historical Maximum Water Level: n/a Next High Tide: 08/01/2014 21:43 (AST), -0.32 ft.

NOAA/NOS/CO-OPS 9754228 Yabucoa Harbor, PR Wind Speed / Gusts / Direction 360 270 15

speed (knots)

0

07/31

00:00

07/31

12:00

direction (true)

08/02

12:00

speed — gusts — direction +
Last Observed Sample: 08/01/2014 12:18 (AST)
Wind Speed: 7 knots Gusts: 10 knots Direction: 74° T

08/01

00:00

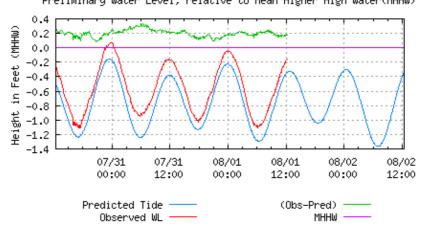
08/01

12:00

08/02

00:00

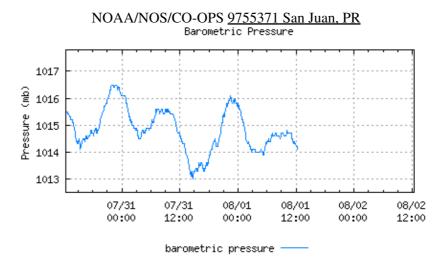
NOAA/NOS/CO-OPS <u>9755371 San Juan, PR</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: -0.15 ft. Predicted: -0.33 ft. Residual: 0.18 ft. Historical Maximum Water Level: Sep 18 1989, 2.77 ft. Next High Tide: 08/01/2014 12:46 (AST), -0.32 ft.

NOAA/NOS/CO-OPS 9755371 San Juan, PR Wind Speed / Gusts / Direction 360 20 270 direction (true) speed (knots) 15 180 5 0 07/31 07/31 08/01 08/01 08/02 08/02 00:00 12:00 00:00 12:00 00:00 12:00 speed gusts direction Last Observed Sample: 08/01/2014 12:18 (AST)

Wind Speed: 17 knots Gusts: 22 knots Direction: 82° T



Last Observed Sample: 08/01/2014 12:18 (AST)

Barometric Pressure: 1014.1 mb

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR

Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW

Observed: 0.01 ft. Predicted: -0.25 ft. Residual: 0.26 ft.

Historical Maximum Water Level: Jul 13 2010, 0.85 ft. Next High Tide: 08/01/2014 12:24 (AST), -0.25 ft.

NOAA/NOS/CO-OPS 9759394 Mayaguez, PR Wind Speed / Gusts / Direction 360 20 270 speed (knots) 15 direction 180 10 90 5 07/31 07/31 08/01 08/01 08/02 08/02 00:00

Last Observed Sample: 08/01/2014 12:18 (AST) Wind Speed: 9 knots Gusts: 13 knots Direction: 306° T

gusts

00:00

12:00

00:00

direction

12:00

12:00

speed

NOAA/NOS/CO-OPS 9759938 Mona Island, PR Preliminary Water Level, relative to Mean Higher High Water(MHHW) 0.8 Height in Feet (MHHW) 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6 -0.8 07/31 08/01 08/02 07/31 08/01 08/02 00:00 12:00 00:00 12:00 00:00 12:00 Predicted Tide (Obs-Pred) Observed WL MHHW

Last Observed Sample: 08/01/2014 12:18 (AST). Data relative to MHHW Observed: 0.09 ft. Predicted: -0.39 ft. Residual: 0.48 ft. Historical Maximum Water Level: Dec 23 2010, 1.26 ft. Next High Tide: 08/01/2014 23:37 (AST), -0.20 ft.

NOAA/NOS/CO-OPS 9759938 Mona Island, PR Barometric Pressure 1017 æ 1016 Pressure 1015 1014 1013 07/31 07/31 08/01 08/01 08/02 08/02 00:00 12:00 00:00 12:00 00:00 12:00 barometric pressure

Last Observed Sample: 08/01/2014 12:18 (AST)
Barometric Pressure: 1014.5 mb

Latest Water Level Observations on MHHW

Station II	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
9751401	Lime Tree Bay, VI	08/01/2014 12:18 (AST)	-0.15 ft	-0.32 ft	0.17 ft	0.11 ft
9751381	Lameshur Bay, St John, VI	08/01/2014 12:18 (AST)	-0.15 ft	-0.30 ft	0.15 ft	0.14 ft
9751639	Charlotte Amalie, VI	08/01/2014 12:18 (AST)	-0.16 ft	-0.28 ft	0.12 ft	0.18 ft
9752695	Esperanza, Vieques Island, PR	08/01/2014 12:24 (AST)	-0.04 ft	-0.37 ft	0.33 ft	0.20 ft
9754228	Yabucoa Harbor, PR	08/01/2014 12:18 (AST)	0.03 ft	-0.53 ft	0.56 ft	0.23 ft
9755371	San Juan, PR	08/01/2014 12:18 (AST)	-0.15 ft	-0.33 ft	0.18 ft	-0.03 ft
9759394	Mayaguez, PR	08/01/2014 12:18 (AST)	0.01 ft	-0.25 ft	0.26 ft	0.04 ft
9759938	Mona Island, PR	08/01/2014 12:18 (AST)	0.09 ft	-0.39 ft	0.48 ft	0.39 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce